

**REMARKS****In the Claims:**

Claims 1, 2, 5-14 and 37-40 remain in this application. Claim 1 has been amended. Claims 3, 4, and 15-36 have been canceled. New claims 37-40 have been added.

**Rejections Under 35 U.S.C. 102(b):**

Claims 1, 2, and 5-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by Glatkowski et al. (U.S. 6,265,466) (hereinafter "Glatkowski").

Claim 1 has been amended to recite arranging the aligned carbon nanotubes between a microprocessor die and a heat remover, to function as a thermal interface material. As Glatkowski is concerned with electromagnetic shielding and does not disclose such an arrangement of carbon nanotubes. Withdrawal of the rejection is requested.

Claims 2 and 5-7 depend from claim 1. Glatkowski fails to disclose all limitations of these claims for the same reason discussed above with respect to claim 1. Withdrawal of the rejection of claims 2 and 5-7 is requested.

**Rejections Under 35 U.S.C. 103(a):**

Claims 8-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Glatkowski in view of Bandyopadhyay et al. (U.S. Pub. 2004/0016912) (hereinafter "Bandyopadhyay").

Claims 8-10 depend from claim 1. As discussed above, Glatkowski fails to disclose the arrangement of the aligned carbon nanotubes between a die and heat remover to function as a thermal interface material, as recited in of amended claim 1. Bandyopadhyay is concerned with a polymeric resin with an electrically conductive filler and a polycyclic

aromatic compound and similarly fails to disclose or suggest the arrangement of the aligned carbon nanotubes between a die and heat remover to function as a thermal interface material. Thus, the references as combined do not disclose all limitations recited in claims 8-10. Withdrawal of the rejection is requested.

Additionally, Glatkowski and Bandyopadhyay, alone or in combination, fail to disclose using a clay alignment material to align the carbon nanotubes, as is recited in claim 10. While Bandyopadhyay discloses clay as an additive, there is no indication in either reference that the clay may be used to align carbon nanotubes. Thus, the cited references fail to provide a suggestion or motivation for one of skill in the art to use clay to align the carbon nanotubes. The rejection is unsupported in the art and should be withdrawn.

Claims 11-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Glatkowski in view of Bandyopadhyay and Lan et al. (U.S. 6,387,996) (hereinafter "Lan").

Because the cited references fail to provide a suggestion or motivation to combine them to result in the method recited in claims 11-14, the rejection is unsupported in the art and should be withdrawn. Claims 11-14 depend from claim 10. As discussed above with respect to claim 10, because neither Glatkowski nor Bandyopadhyay discloses or suggests that clay may be used as an alignment material to align carbon nanotubes, the two references fail to provide a motivation to combine them to result in the method recited in claim 10. Lan fails to rectify this deficiency. Thus, none of the cited references provide a suggestion or motivation to combine them to result in the method recited in claims 11-14.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION  
(37 C.F.R. § 1.8(a))

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